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AUTHOR Karcz, Stan A.
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ABSTRACT

This study analyzed the short-term effects of the Youth Advocate Liaison (YAL) service upon selected behavioral measures from the school, police, and courts, using a sample of 147 former securely detained youth, aged 13 through 18, in Lake County, Illinois. Data sources were 14 school districts, 2 special education units, 321 police municipalities, and the juvenile court. The methodological approach was a complete model of the problem using a Logit analysis to determine the likelihood of each desired outcome behavior. The nine independent variables were YAL service; attendance in school prior to detention; estimate of grade level of achievement; referral for special education; delivery of regular and special instructional services; related service; family income; age; and race. It was found that the presence of the YAL increased the probability of a station adjustment disposition (a preferred disposition) for all detainees regardless of race. Other findings include the following: (1) YAL service increased a White detainee's probability for school attendance but did not affect that probability for Black or Hispanic detainees; (2) YAL presence in conjunction with a referral for special education increased the likelihood for suspension; (3) YAL service decreased the probability for future custody for Hispanics and somewhat for Whites, but increased that probability for Black detainees. (Author/KM)

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THE IMPACT OF A SPECIAL EDUCATION RELATED SERVICE ON SELECTED BEHAVIORS OF DETAINED HANDICAPPED YOUTH

Stan A. Karcz

Center for the Study of Correctional Education

Department of Education and Human Services

University of Wisconsin-Stout

Menomonie, WI 54751

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ABSTRACT

The purpose of this study is concerned with an analysis of the short-range effects of the Youth Advocate Liaison (YAL) service upon selected behavioral measures from the school, police, and courts. The selected measures for the three agencies are: attendance and suspension for school, custody and station adjustment for police, and secure detention and incarceration for the courts.

The YAL is a school-funded program designed to increase the likelihood of handicapped former detainees reentering school, remaining there, and avoiding further involvement with the police and with the courts.

The sample consists of 147 former securely detained youth, age range 13 through 18 years, who were in the Lake County, Illinois, Hulse Detention Center between July 1, 1980, and June 30, 1982. The sources of data are 14 school districts, 2 special education units, 321 police municipalities, and the juvenile court--all of which are in Lake County.

The methodological approach in this study is a complete model of the problem using a Logit analysis for each outcome measure. The Logit analyses include eight other characteristics along with YAL to determine the likelihood of a desired outcome behavior. The nine attributes or independent variables for each of the Logit models are: a) YAL service, b) attendance in school prior to detention, c) estimate of grade level of achievement, d) referral for special education service, e) delivery of regular and special instructional

services, f) related service, g) family income, h) sex, and i) race.

It was found that the presents of the YAL increases the probability of a station adjustment disposition (which is a preferred disposition) for all detainees regardless of race.

One of the several logit findings suggests that the YAL service increases a White detainee's probability for school attendance but neither increases nor decreases a Black's or Hispanic's probability for school attendance. The presence of the YAL in conjunction with a referral for special education increases the likelihood for suspension. Also, the YAL program has a tendency to decrease the probabilities of future custody experiences for Hispanics and somewhat for Whites. However, Black detainees in conjunction with the YAL service have a greater likelihood of being placed into custody. The YAL, in conjunction with the estimated grade characteristics, also increases the probability of detainees receiving a station adjustment dispostion. These latter findings indicate that the YAL clearly helps the lower functioning student.

Overall, the YAL itself and/or with selected interaction attributes favorably affects most detainee's probabilities for successful or desired outcomes. The fact that the YAL is "effective" as a special education related service provides an additional rationale to one based on "equity" considerations alone.

Overview

Detained youth with handicapping conditions have not been given adequate consideration under P.L. 94-142: THE EDUCATION FOR ALL HANDICAPPED CHILDREN ACT OF 1975. This study is concerned with the educational problems facing the former securely detained (SD) youth upon release and the subsequent problems they face among three public sectors of the community: school, police, courts. Specifically, the study is concerned with an analysis of the impact of a special education related service position known as the Youth Advocate Liaison (YAL) along with other selected factors upon six outcome measures--attendance, suspension, custody, station adjustment, secure detention, and incarceration.

The questions posed address whether or not the YAL itself, or in conjunction with other factors, affects the outcome measures within the three public sectors.

Role of the Youth Advocate Liaison (YAL) Probation Program

The YAL program is a school initiated and school funded program which is designed to increase the likelihood of the client's success in reaching school, remaining in school, and avoiding further involvement with the police and courts.

The YAL does not directly enroll the youth in the public schools but rather enhances the probation officer's liaison with the public school through support efforts, primarily soliciting program assistance from the Special Education Directors. The YAL position, funded by the public school, is administered on an

intermediate level of government such as a county. Services are provided by the YAL to two key agencies: the public schools and the courts. Major services provided to both the schools and the courts consist of developing and implementing a viable management information system, offering technical assistance, and providing an ongoing evaluation of the effectiveness and efficiency of these services.

Through the determination and classification of interagency procedures and forms flow and through communication of this information, the YAL helps the "court appointed" probation officers and/or parents to:

1. Enroll their clients in the public schools,
2. Forward necessary records (i.e., so as to maintain school credit) along with the Individualized Educational Program (IEP) in a timely manner to the receiving school district,
3. Monitor the child's progress, and
4. Cooperate with the parent and/or parent surrogate for the child for purposes of participating (a) in the multidisciplinary staffings, (b) in IEP developments, (c) in annual evaluations, and (d) in utilizing the guarantees of "due process" procedure.

The functions of the probation officers listed above reflect expectations of the school district toward a parent or toward someone charged with a legal supervisory relationship to a child. The YAL helps organize these public school expectancies and

communicate them in a meaningful manner to the probation officers. Similarly, probation expectancies of the school are organized and related to school officials.

In essence, the purpose of the YAL which underlies these functions is to inform both the court probation officers and school represenatives of their mutual expectations and respective services and to develop procedures to address their common concerns. Two important underlying attitudinal assumptions used to justify this enhanced court/school communication are that:

1. A court/school linkage to special education service will make a positive difference to the handicapped, formally detained youth. Both agencies, in sum, expect more from this youth.
2. The exchange of complete education-related records permits both the negative and positive information to be known by those agencies crucial to an individual's further performance. In other words, an ongoing communication "feedback" is provided for both agencies.

Role of other Factors in Influencing the Outcome Measures

There are other influences on the six outcome measures in addition to the presence or absence of the YAL. The following are additional factors determined from the literature search which may affect students' (outcome) behavior:

A. School related factors during the period under study:

   1. Attendance in school prior to secure detention

2. Estimated grade level of achievement
3. Referral for a special education service
4. Participation in a special education instructional service
5. Participation in a special education related service

B. Demographic factors:

1. Family income
2. Sex
3. Race

The school related factors can be grouped into three categories: those that exemplify self-expectations, expectations from significant others, and an expectation for mutual interaction (see Figure 1). For example, a student's attendance in school prior to secure detention and his/her estimated grade level of achievement were viewed as operational-measurable variables exemplifying a student's "self-expectations."

Referral for a special education service is viewed as the schools' "expectations for the student"; i.e., the school expected the student to succeed.

Figure 1

OTHER SELECTED SCHOOL AND DEMOGRAPHIC FACTORS

BY TYPE OF EXPECTANCY

School Factors[a]	Type of Expectation
1. Attendance prior to secure detention	Self
2. Estimated grade level of achievement	Self
3. Referral for special education services	School
4. Participation in a special education instructional service	Mutual
5. Participation in a special education related service	Mutual
Demographic Factors	
6. Family Income	Accidental
7. Sex	Accidental
8. Race	Accidental

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[a]The same school and demographic factors along with the YAL will be used to determine their respective influences on each of the six outcome measures: attendance, suspension, custody, station adjustment, secure detention, and incarceration.

Problem Statement

A mechanism to reduce the difficulties of transitions among school, police, and court sectors has been proposed and implemented in the YAL approach. The consequences of its implementation have not as yet been determined by any formal analysis. This study will analyze school, police, and court outcome measures which may be influenced by the YAL and by selected other factors.

Significance

Importance of the Study

The importance of this study is the determination whether or not the YAL has an impact on six measures of concern found in school, police, and court agencies. In a period characterized by scarcity of funds, the YAL has a better chance of being noticed as significant and of being funded if that related service can be demonstrated to cause better outcome levels in juvenile programs. Also, this analysis of the "effectiveness" of the YAL could well enhance the argument for the existence of the YAL position from one based on "equity" considerations alone (from P.L. 94-142) to one based on equity and effectiveness.

Research Question

> The primary research question emanating from the problem statement is Does the Youth Advocate Liaison (YAL) practice have a short-range effect upon each of the six outcome measures?

A secondary research question, given additional selected factors suspected of having a short-range effect upon these outcome measures, reads:

> Does the YAL practice in conjunction with the effects of eight other selected factors have a short-range effect upon each of the six outcome measures?

The specific questions of concern which arise from a discussion of the problem and which require further analysis are organized by the three sectors (school, police, and courts). The following questions pertain to a youth <u>after</u> s/he has had a secure detention experience at the Lake County Juvenile Complex during the period July 1, 1980, to June 30, 1982.

A. School Sector

1a. Is the probability of school attendance given YAL services greater than the probability of attendance without YAL services?

1b. Is attendance more probable for youth with the YAL services in conjunction with the other selected factors than for youth given only the other selected (see Figure 1) factors?

2a. Is the probability of school suspension given YAL services lesser than the probability of suspension without YAL services?

2b. Is suspension less probable for youth with the YAL services in conjunction with the other selected factors than for youth given only the other selected factors?

B. Police Sector

1a. Is the probability of police custody given YAL services lesser than the probability of custody without YAL services?

1b. Is police custody less probable for youth with the YAL services in conjunction with the other selected factors than for youth given only the other selected factors?

2a. Is the probability of police station adjustment given YAL services lesser than the probability of station adjustment without YAL services?

2b. Is police station adjustment less probable for youth with the YAL services in conjunction with the other selected factors than for youth given only the other selected factors?

C. Court Sector

1a. Is the probability of juvenile court secure detention given YAL services lesser than the probability of secure detention without YAL services?

1b. Is juvenile court secure detention less probable for youth with the YAL services in conjunction with the other selected factors than for youth given only the other selected factors?

2a. Is the probability of court incarceration decision given YAL services lesser than the probability of incarceration without YAL services?

2b. Is court incarceration decision less probable for youth with the YAL services in conjunction with the other selected factors than for youth given only the other selected factors?

Review of Literature

The review of literature found that major factors influencing the various outcomes of interest among the juvenile programs are low self-expectations, low expectations from significant others (parents, peers, schools, and other authorities), inadequate feedback from self and significant others, and inadequate feedback from demographic needs. These major factors can be seen affecting unsuccessful outcomes among all three sectors of concern--schools, police, and courts--and for affecting all the outcome measures of concern for this study--attendance, suspension/expulsions, police station adjustments, police arrests, court detentions, and court decided incarcerations.

The school attendance related studies regarding drop-outs and truants emphasized the negative expectations emanating from the school; i.e., teachers who had low expectations of these students, schools which provided them with grades often less than C, and administrators/teachers who did not involve them in extracurricular activities. This summary is not meant to be a

portrayal of one-sided set of negative expectations from significant others or to be a portrayal of their constant use of negative feedback only. Truants and drop-outs also contributed to these negative attitudes through their non-involvement, through their own low self-concept, and through their own inappropriate feedback or control mechanisms.

In other studies, students are differentiated with respect to school suspensions; i.e., between one time and multiple suspensions (the latter containing students who exhibit lower mean age, are more likely to be Black, have a lower grade level, have a lower IQ, have a lower grade point, have a higher mean number of siblings, are more likely to live with mother only, and attend more schools). The school suspended student is most summarily described in a Chicago Commission on Human Relations Study as the student exhibiting "gross misconduct."

Research indicates that a certain amount of discretion exists for police to decide either to arrest a juvenile or not to arrest him/her. Usually, police will arrest an offender if the crime is violent. Task minded police management styles and order maintenance communities resulted in more arrests. The U.S. Justice Department found those arrested had similar characteristics to the school truant and drop-outs. The difference is that the U.S. Department of Justice placed more importance on social class and neighborhood conditions.

An underlying theoretical foundation for custodies is derived from labeling theory which essentially states that negative

expectations create negative labels which become self-fulfilling prophesies for both the offender and for the police. Police counseling services are found important--the lack of these lead to more arrests.

A positive school determinant was shown in Bachara and Zaba's study (1978) of learning disabilities as the special education instructional program for juvenile delinquents. The instructional program resulted in significant reductions in recidivism rates.

Two studies regarding institutionalized juveniles found that recidivists are generally "person" offenders. Also, the term "violent" is more descriptive of these offenders than was the term "serious." Violent offenses included aggravated battery, armed robbery, and murder. Consensus was that violent personal offenders would continue being institutionalized.

On the other hand, non-violent offenders need social networks to reenter the community. These supportive networks must have staff responsibile for each youngster. This same staff must help the significant others in their lives to become more effective in supporting these youngsters. Effectiveness must include learning to set limits for the youth so that the young person is more personally accountable and must include learning to provide appropriate feedback to these youth so as to offset the one-sided negative feedback to which they are so accustomed.

Methodology

The design of the study was ex post facto. Data relevant to the solution of twelve questions emanating from the problem

statement were obtained from four separate Lake County agency sources: (a) from directors of special education, (b) from school district superintendents, (c) from municipal police chiefs, and (d) from the juvenile court itself. Sampling procedures required that the selected population for this study consisted of approximately 150 students form the Lake County detention center. About three-fifths of these students were in the control group while the other two-fifths received the experimental treatment--the services of the YAL. This service came into force after a student spent five (5) days or more in the detention center. This time period was arbitrarily selected by the designers of the program. Although arbitrary, this time period resulted in an approximation of a random assignment.

Letters and data cards to respondents were devised as the mechanisms for gathering data. Items were built into the data cards to increase the reliability of this measure. This reliability was seen as further controlling extraneous variance and reducing random error.

Data collection included a court support and approval statement in the data request letter. Letters and data request cards were mailed to respondents. The follow-up consisted of initial telephone calls, an "on-site" visitation, and follow-up telephone calls.

The method for testing the stated hypotheses was the logit analysis. The logit analysis tested for significance of the YAL

in conjunction with eight other selected factors and was used to determine various probabilities for given outcomes.

Logit Approach

In the logit model, the outcome measures are treated as dichotomous dependent variables; i.e., either attending school or not attending, either suspended or not suspended, etc. Since the dependent variables operationally have a dichotomous character, and given that these measures are each to be considered as a function of selected factors, the multiple regression-like methodology selected was the Logit Analysis.[1] In this type of analysis, the conditional probability is determined; e.g., of school attendance given the services of the YAL and the eight other (factors) variables. In other words, the logit approach analyzed each of the relations between each of the dependent variables and each of the nine independent variables of which YAL presence is one, income another, etc. The secondary research question essentially asks Does the YAL in conjunction with all these other factors have a short-range effect upon each of the dependent variables? The appropriateness of the logit procedure is to determine the contribution of each of the independent variables to a given dependent variable, given the presence or

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[1]A form of regression where the dependent variable is dichotomous.

absence of the YAL. Consider the Y = 1 if the detainee attends school and Y = 0 if s/he does not, then the following linear[1] equation represents the values of the variables:

$$Y_a = \beta_0 + \beta_1 r_a + \beta_2 s_a + \beta_3 t_a + \beta_4 u_a + \beta_5 v_a + \beta_6 w_a + \beta_7 x_a + \beta_8 y_a + \beta_9 z_a + \varepsilon_a.$$

where

r_a: attendance prior to detention

s_a: estimate of grade level of achievement

t_a: YAL service

u_a: referral for special education service

v_a: participation in a special education instructional service

w_a: participation in a special education related service

x_a: family income

y_a: sex

z_a: race, and

ε : random disturbance

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[1]The same variables in a log linear equation are:

$$\log \frac{p_a}{1 - p_a} = \beta_0 + \beta_1 \log r_a + \beta_2 \log s_a + \beta_3 \log t_a + \beta_4 \log u_a + \beta_5 \log v_a + \beta_6 \log w_a + \beta_7 \log x_a + \beta_8 \log y_a + \beta_9 \log z_a + \varepsilon_a$$

where p: the attendance probability.

The other five equations are the same except in that the dependent variable Y_a becomes another one of the measures. The next considered linear equation would specify that $Y_b = 1$ if the detainee is suspended from school and $Y_b = 0$ if s/he is not, etc.

Theil (1971) states that "The object of those analyses is thus a probability, which implies that we have to face the problem that this is a quantity which is confined to the interval from zero to one." In logit, coefficients are interpreted as the effect on probabilities. The coefficient is the change in probability associated with a change in a given independent variable.

Findings

YAL Interaction Variables

To determine the extent to which the YAL service interacted with each of the other eight attributes, each of the six logit outcome models had the YAL interactions added to it, one at a time.

Discussions of Characteristics within the Logit Models

In this section, the findings of the final models (see Table I) are discussed as a whole and are also discussed in terms of their significant variables. Examples are provided for each of the six models which specify the probability of a particular outcome by the typical detainee with given income levels with given estimated grade levels, type of school instruction and YAL services. The typical detainee's characteristics were determined

TABLE I

FINAL MODELS WHICH INCLUDE THE SIGNIFICANT
(.05 LEVEL) YAL INTERACTIONS

Explanatory Variables	Dependent Variable: Attendance	Suspension	Custody
Independent Variables			
Intercept	-1.626 (.326)[a]	2.482 (.521)	- .288 (.824)
Prior Attendance	.431 (.486)	2.571 (.023)[c]	- .870 (.102)[b]
Estimated Grade Level	.00112618[d] (.104)[b]	-2.70075428[f] (.068)[b]	- .0000559098[g] (.924)
YAL	.814 (.650)	-1.309 (.150)	-1.716 (.146)
Income	- .00003013 (.600)[e]	- .34825574 (.558)[f]	.084 (.054)[b]
Sex	-1.700 (.067)[b]	- .304 (.762)	.687 (.375)
Race1 (White)	-1.896 (.029)[c]	-1.652 (.028)	- .762 (.334)
Race2 (Black)	- .239 (.756)	- .406 (.562)	- .198 (.795)
Referred	.390 (.600)	- .963 (.350)	- .419 (.547)
School	3.788 (.005)[c]	2.238 (.093)[b]	1.533 (.057)[b]
Class	3.044 (.024)[c,d]	4.246 (.005)[c]	.883 (.361)
Resource		2.850 (.054)[b]	1.314 (.210)
Regular	2.687 (.017)[c]	2.682 (.016)[c]	- .022 (.964)
YAL/Estimate Grade			
YAL/Race1	3.476 (.017)[c]		1.504 (.259)
YAL/Race 2	- .072 (.960)		2.543 (.066)[b]
YAL/Referred		2.364 (.050)[c]	
YAL/School	-3.434 (.044)[c]		
YAL/Class and Resource	- .929 (.591)		
YAL/Regular	-1.740 (.250)		
Variation:	[e]Income cubed and est. grade cubed	[f]log (est. grade) and log (income)	[g]est. grade cubed
Model Chi-Square: (-2 log L.R.)	39.96 with 16 D.F.	43.42 with 13 D.F.	16.72 with 14 D.F.
Model Probability:	(.0008)[c]	(0.0000)[c]	(.2716)
Fraction of Concordant Pairs of Predicted Probabilities and Response Predicted Probability and Probability	.827	.857	.786

TABLE I (continued)

Explanatory Variables	Dependent Variable: Adjustment	Detention	Incarceration
Independent Variables			
Intercept	-8.758 (.060)[b]	- .197 (.872)	.033 (.980)
Prior Attendance		- .982 (.057)[b]	-1.604 (.032)[c]
Estimated Grade Level	1.62564140[h] (.417)	- .00038964[i] (.511)	- .00059869[j] (.610)
YAL	6.937 (.041)[c]	.584 (.173)	- .674 (.438)
Income	.062 (.203)	.00009665[i] (.086)[b]	- .054 (.493)
Sex		.560 (.491)	
Race1 (White)	1.004 (.295)	- .602 (.376)	
Race2 (Black)	.269 (.776)	- .086 (.892)	
Referred	.868 (.345)	- .451 (.516)	
School	2.087 (.102)[b]	1.393 (.067)[b]	.230 (.823)
Class	.808 (.598)	.431 (.658)	-7.048 (.757)[d]
Resource	2.154 (.155)	.456 (.640)	
YAL/Estimate Grade	- .769 (.045)[c]		
YAL/Race1			
YAL/Race2			
YAL/Referred			
YAL/School			
YAL/Class and Resource			
YAL/Regular			
Variation:	[h]log (est. grade)	[i]income cubed and est. grade cubed)	[j]est. grade cubed
Model Chi-Square: (-2 log L.R.)	18.44 with 11 D.F.	15.44 with 12 D.F.	10.79 with 7 D.F.
Model Probability:	(.0729)[b]	0.2182	.1479
Fraction of Concordant Pairs of Predicted Probabilities and Response Predicted Probability and Probability	.747	0.696	.758

[a]levels of significance are expressed within parentheses.

[b]Probability: between .10 and .05.

[c]Probability < ,05.

[d]Compined special class and resource programs.

by the mean values of each of these attributes (see Table II). In situations where several dichotomous characteristics are possible, the dominant mean characteristic was selected.

The typical detainee in this study was a white male who had attended school prior to being placed into a secure detention facility. He is at an estimated grade level of 8.9. His family had an income of $11,374 annually. In addition, two other income levels were selected for comparison. These are the income value at one standard deviation below the mean and one above. At one standard deviation below, the family income is $5,733 (rounded to $6,000) and is considered low for purposes of this study. At one standard deviation above, the family income is $17,015 (rounded to $17,000) and is considered high. The types of school instruction selected for comparison are the special education resource room and the regular education program. In two logit models, "resource room" was combined with "special class" for an in regular school special education heading.

In addition, the final adjusted models are discussed according to these attributes as they vary across the six logit models. The significant attributes are again highlighted. Also, the specific effects of the YAL within each adjusted final model are discussed.

Typical Detainees

An example of the probability for attendance by a typical detainee given certain attributes can be seen in Table III. The solution for this probability involves the following calculation:

TABLE III

PROBABILITY OF SCHOOL ATTENDANCE, BY INCOME
AND BY TYPE OF SCHOOL PROGRAM

The following table contains the probability of school attendance for a typical detainee given certain school programs, by three income levels.

	With YAL Services (in percent)	Without YAL Services (in percent)
Income[a] - High:		
In a Regular Education Program	.7488	.1888
In Either a Special Class or in a Resource Room	.9056	.2496
Income - Average:		
In a Regular Education Program	.7686	.2059
In Either a Special Class or in a Resource Room	.9144	.2704
Income - Low:		
In a Regular Education Program	.7745	.2115
In Either a Special Class or in a Resource Room	.9170	.2771

[a]High income = approximately one standard deviation above the mean or $17,000.

Average income = approximately at the mean or $11,000.

Low income = approximately one standard deviation below the mean or $6,000.

TABLE II

MEAN OF THE MODEL ATTRIBUTES
(147 Observations)

Attribute	Mean	Standard Deviation	Range	
			Minimum	Maximum
Prior[a]	.781	.415	0	1.0
Grade[b]	8.921	1.480	4.0	12.0
YAL	.293	.456	0	1.0
Income	11.374	5.461	3.8	33.5
Sex (Male)	.918	.275	0	1.0
Race2 (Black)	.408	.493	0	1.0
Race1 (White)	.469	.501	0	1.0
Referred	.374	.486	0	1.0
School	.163	.371	0	1.0
Class	.102	.304	0	1.0
Resource	.095	.295	0	1.0
Regular	.388	.489	0	1.0
Related	.259	.439	0	1.0

[a]This attribute has 137 observations.

[b]This attribute has 139 observations.

$$P = \frac{1}{1+e^{-\lambda}}^{1}$$

The typical detainee given an average income and in a regular education program without YAL services had a .2052 probability of attending school (see Table III). With YAL services, the same youth had a .7677 probability of attending school. The same student without YAL services but in a special education resource room program had a .2695 probability of attending school. Adding YAL services for this latter student increased his probability for attendance to .9140. Clearly, the YAL facilitates attendance for the typical detainee (see Figure 2) and more so for the special education student.

There exist an infinite number of possible combinations of student attributes, at least when one considers the two continuous independent variables. For purposes of this study, however, the discussions will be limited to significant variables and to the

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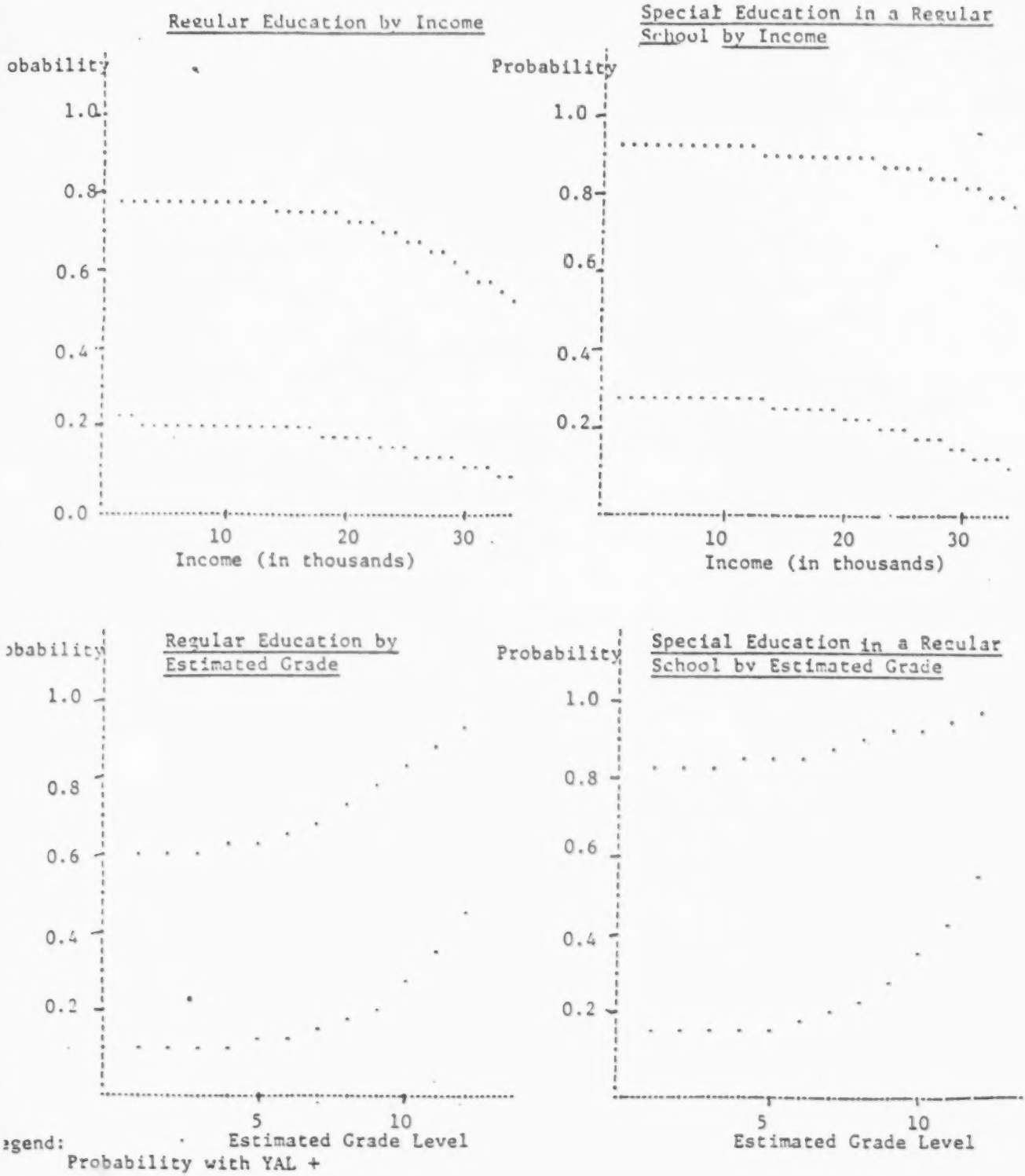
[1] $\lambda = a + \beta_1 r + \beta_2 S + \beta_3 t + \beta_4 u + \beta_5 V_4 + \beta_6 V_2 + \beta_7 V_1 + \beta_8 X + \beta_9 Y + \beta_{10} Z_1 + \beta_{11} Z_2 + \beta_{12} t \cdot V^a_4 + \beta_{13} t \cdot V_2 + \beta_{14} t \cdot V_1 + \beta_{15} t \cdot Z_1 + \beta_{16} t \cdot Z_2.$

FIGURE 2

PROBABILITY OF SCHOOL ATTENDANCE FOR A TYPICAL DETAINEE, BY INCOME AND BY ESTIMATED GRADE



role of the YAL as evaluated at each of 34 income levels for two of the possible instructional programs and to the role of the YAL as evaluated at each of 12 estimated grade levels for two of the possible instructional programs.

Summary of Individual Logit Models

The foremost question in mind for each of the six logit models was Does the YAL itself or in interaction with other attributes affect the various outcome probabilities? The answer is "yes"; four of the six models were significantly affected. However, five of the six models were additionally affected by one or more special education instructional programs. Table IV provides an overview of the significant factors at Probability levels less than .05, .10, and .20 for each of the six logit models. This table also provides an introduction into the next discussion which centers on the contributions of each attribute to the various models by that attribute.

Discussions of Characteristics Across the Logit Models

The discussion of variables across models is limited only to those variables which are significant or nearly significant (between probability levels .20 and .11) variables.

Attendance Prior to Secure Detention

Attendance prior to secure detention is a significant variable for four of the six Logit models. A detainee with prior

TABLE IV

OVERVIEW OF THE SIGNIFICANT ATTRIBUTES AT PROB LEVELS < .05, .10, AND .20

	Attendance	Suspension	Custody	Adjustment	Detention	Incarceration
Desired Effect	++	--	--	++	+?	--
Intercept				-		
Prior Attendance		++	-		-	--
Estimate Grade	+	-				
YAL		(-)	(-)	++	(+)	
Income	-		+	(+)	+	
Male	--					
Black						
White	--	--				
Referred for Spec. Ed.						
Special School	++	+	+	+	+	
Special Class	++	++				
Resource Room		+		(+)		
Regular Education	++	++		(+)		
YAL and Est. Grade						
YAL and Black			+			
YAL and White	++					
YAL and Referred		+				
YAL and School	--					
YAL and Class or YAL and Resource						
YAL and Regular						

Legend: ++ = increases probability < .05
+ = increases probability between .10 and .06.
-- = decrease probability < .05
- = decreases probability between .10 and .06
(+) = increases probability between .20 and .11
(-) = decreases probability between .20 and .11.

attendance has a higher likelihood for being suspended. However, prior attendance was negatively correlated to custody, to detention, and to incarceration. A student with attendance in school prior to his/her first detention experience had lower likelihood of being placed into custody, of being detained, and of being incarcerated.

Estimated Grade Level

The higher the estimated grade level of a detainee, the better are his/her chances for attending school. Also, the higher the estimated grade level of a detainee, the lower the likelihood that s/he would be suspended. It seems that the costs of not succeeding were too high for these detainees.

Youth Advocate Liaison and Selected YAL Interactions

The school-based YAL program significantly affected the police station adjustment outcome probabilities. The YAL program increased the probability that detainees in custody receive a more favorable police disposition. Other logit models were also affected by the YAL but not at an acceptable significance level. A detainee in receipt of the YAL service had a lesser likelihood to be suspended, a lesser likelihood to be placed into custody, and a greater likelihood to receive another secure detention experience than a detainee not in receipt of YAL services.

One of the more interesting aspects of the YAL program was its interaction effect with selected attributes. The YAL, for example, interacted with the White detainee variable and indicated

that without this interaction effect the White students would probably not attend school. Although the YAL-Black interaction did not affect the Black detainee's probability for school attendance, this interaction effect did lead to an increase for a Black youth's likelihood of being placed into custody. The underlying causes (socioeconomic and/or institutional) for either of the race interaction effects were unknown. In the YAL and referral interaction, the students referred actually obtained higher probabilities for suspension. This might be due to the more aggressive type of handicapped person being referred.

Overall, the YAL interactions for all the instruction variables signified various decreases in the probabilities for school attendance. Apparently, the aggressive type of student served by the YAL probably accounts for these YAL/instruction interaction effects. Finally, the YAL interacted inversely with estimated grade. This made sense since the YAL was designed to assist the handicapped and often lower functioning student. Also, as this interaction effect increased, the probability for a station adjustment disposition decreased.

Some of the YAL interaction effects did not seem desired. However, the fact that these have occurred and can be identified highlights the need for further inquiry.

Income

Family income was significant in three of the models: attendance, custody, and secure detention. Higher family income

also had some impact on increasing the likelihood of station adjustment for all detainees. It was somewhat surprising that higher incomes were associated with lower probabilities for attending school and that higher incomes were associated with higher probabilities of being placed into custody. The underlying causes for these income effects were not obvious from the models. Whether educational institutions have overcompensated in trying to equitably treat detainees at all income levels, or whether some degree of affluence is necessary before one acts out, or whether other sociodemographic characteristics have been captured by this family income attribute was not clear.

It was evident, however, from the detention logit that the higher the family income, the greater the probability of a detainee to experience an additional secure detention.

Sex

The probability of male detainees for attending school was significantly lower than that of females for attending school.

Race

White detainees had a lower probability for attending school than did Blacks or Hispanics. However, once Whites attended school, they had a lower probability for being suspended than did Blacks or Hispanics.

Black students also had an interaction effect with the YAL. A higher probability for being placed into custody existed after the YAL services were provided.

Special School

The special education school factor was significant in the incarceration model. After a secure detention experience, a detainee from a special education school placement had a significantly higher probability than a detainee not in a special school for:

a. School attendance

b. Suspension

c. Custody

d. Station adjustment

e. Secure detention

It seems that the special education detainee from the special school setting had some noticeable difficulties with all three public sectors.

Although the detainee without YAL services had a higher probability for attending school, the detainee interacting with the YAL does not. In fact, the YAL and special school interaction effect within the attendance logit model more than completely negates this increase. This may be due to the nature of "violent" handicapped detainees whom the YAL serves.

Special Class and Resource Room

As separate factors--special class and resource room--each was significant in the suspension logit model. Both special education programs led to a higher likelihood for suspension than all of the other instructional programs analyzed in this study. Students in

special classes had the highest likelihood for suspensions. Special class and resource room were combined into one factor called special education in the regular school. This was done for statistical purposes for both the attendance and the incarceration models.

The special education in the regular school factor increased the probability of attendance for detainees. However, the effect of the YAL interaction with special education in the regular school slightly decreased this probability. Nevertheless, of all the instruction options for detainees with YAL services, the greatest likelihood for success was in the special education in the regular school program; in other words, being in either the special class or resource programs. White students, because of the YAL/Race interaction effect, had an additional likelihood for school attendance.

An incidental comment to this discussion, but nevertheless an important finding in the Attendance Logit, was that Black students and Hispanic students did not seem to gain from the YAL/Race interaction effects, nor did they seem to gain from all of the YAL/Instruction interaction effects. That is not to say that this lack of interaction benefit was due to the YAL. It may be due to the nature of the detainee and/or some other socioeconomic or institutional cause.

However, those Black and Hispanic detainees not served at all by the YAL had their probabilities for school attendance improved

if they received any special education program, particularly the special school program.

Practical Implications

This section provides a discussion of direct implications for local administrators, for direct service personnel, and for state agency personnel. This is done for each of the three public agencies and especially for the public schools. Finally, several operational implications are listed for the YAL program.

Education Response: Administrators

The YAL program, given continued state education agency funding pursuant to Chapter 122, Article 14-7.03 of the SCHOOL CODE OF ILLINOIS, is an appropriate program.

Initially, school administrators might consider an internal review of the appropriateness of school attendance, suspension, and expulsion policies and practice for this special population. Schools need to more adequately consider the social and/or interagency consequences of such a severe institutional response to students' behavior and must examine their role in providing services to these former detainees. Also, school administrators, given the individual profiles, could determine the manner in which the schools can manipulate and/or augment their services to enhance the likelihood of a detainee's school attendance, etc. Perhaps this could be done through a greater use of a school social worker program, especially for those detainees who are marginal cases (close to the .50 probability for attending school).

As a result of conducting this study, it is apparent that the impacts of the YAL program and of school provided special education programs are interagency-wide in scope and influence.

Courses of action for responsible administrators concerned with a response to these findings include one or more of the following strategies for change.

School administrators should investigate underlying institutional causes and other socioeconomic causes for the various effects, especially for the YAL interaction effects with Blacks and with Hispanics.

The office of Juvenile Justice and Delinquency Prevention (1981) states that the uneven relationship between class and delinquency suggests that the effects of class on delinquency are mediated by factors other than simply the attribute Race. The Justice report quotes authors who attribute causes of delinquency more to age, sex, family features, and urban/rural differences as possible mediators. But what was more to the point, they continue and are ". . .institutional reactions to the visible artifact of class. Artifacts of class refer to the speech, dress, manners of a given socioeconomic class of minorities. Paramount among these for young persons are class-related policies and practices in schools."

One of the institutional reactions to socioeconomic status can be observed in a school's response toward students from low income families. The findings in the study suggest that the schools in

Lake County did not discriminate against students from families with lower incomes. In fact, the opposite is found to be true--schools especially provided services to students from families with lower incomes (see Figure 2).

Whether or not other institutional reactions or socioeconomic variables are present as underlying determinants is a matter to be discovered.

A less direct implication of these findings but one still worthy to pursue has been articulated by the Justice Department. The Office of Juvenile Justice and Delinquency Prevention (1981) believes that it is important to change a student's access to opportunities and rewards. Schools must examine and work to change the ways in which a school organization operates on prior school experience to affect bonding, the distribution of opportunity, and labeling. The Office of Juvenile Justice and Delinquency Prevention has stated that the organizational structures within schools are often tied to unintended discrimination reflected in formal rules and policies and in informal habitual practices. Often a style of behavior is required that has no intrinsic bearing on educational achievement or social order. This type of regulation penalized one class of students disproportionately. Teacher expectations for appropriate conduct might result in more severe sanctions against certain groups. The composition of classes, tracks, extracurricular activities, honor societies, and the like may reveal the operation of assumptions and practices tied to a class or race.

Education Response: Teachers

Even though the choice of a school curriculum is a school based responsibility, teachers generally must select appropriate materials and learning activities to reach these planned objectives. A more remote implication of these findings but again relevant for those teachers who relate their materials and curriculum objectives in a manner consistent with the individual and/or group needs of the student is to utilize accurate descriptions of student needs in selecting appropriate and effective curriculum activities.

The teacher is viewed by most as the major intervening force coordinating the planned learning experiences with the individual needs of the detainees. In fact, the Office of Juvenile Justice and Delinquency Prevention (1981) research suggests that teachers must be conscious of their day-to-day patterns of social interactions with students since their classrooms are considered the major arena of influence for effective change. This is particularly true for those characteristics of detainees which have been found significant. Teachers are in an excellent vantage point to review curriculum objectives, methods, and procedures as these relate to either facilitating or not facilitating desired outcomes for various groups of detainees.

Education Response: State Education Office

A generally invisible but most important decision maker in the provision of all school programs and funding authorizations is the

state education office. The entire YAL program currently receives its authority and funding from the state education office under the auspices of Chapter 122, Article 14-7.03 of the SCHOOL CODE OF ILLINOIS.

Several important possible responses exist for the state education agency, especially since the unique special education related service known as the Youth Advocate Liaison has been found effective.

State education agency personnel along with local administrators might consider replicating the YAL program for the other detention facilities scattered throughout the state. Such replications could be analyzed to see if other samples provide similar results. Less direct implications for state agency officials might be that they consider funding a similar type of program for those detainees not in secure detention for five days or more and for those in detentions five days or more who are not handicapped or suspected of being handicapped. As a result of these findings, the state education office may wish to combine regular education and special education programs and funding sources to meet both the special education and regular education needs of students within secure detentions; e.g., through a possible mix of programs and funding authorities pursuant to Chapter 122, Artile 18.3 and in Chapter 122, Article 14-7.03 of the SCHOOL CODE OF ILLINOIS. As recalled from earlier discussions, the current funding authority as interpreted by the

state education agency restricts YAL services to the handicapped and to suspected handicapped detainees.

Also, a less direct but related implication of the findings is that the state education agency might also encourage the YAL program by highlighting the YAL as a necessary program throughout the state. This priority could be included in the state agency's cooperative plan consistent with (P.L. 91-230, part D), THE EDUCATION OF THE HANDICAPPED ACT and/or with the 10 percent set aside monies for inservice available through P.L. 94-142.

Finally, as a less direct implication, the state education agency may wish to update its RULES AND REGULATIONS TO GOVERN THE ADMINISTRATION AND OPERATION OF SPECIAL EDUCATION to more appropriately address the regulatory time lines and interagency rights/responsibilities toward this and other similar populations of youth in trouble with the law.

Police Response: Administrators

Probably one of the more important administrative responses to the various Logit profiles would be to review the internal institutional policies and procedures toward these youngsters in light of the significant findings.

This is especially true for those findings which suggest that the YAL service as it interacts with Black detainees increases the likelihood for police custody. Many of the Office of Juvenile Justice and Delinquency Prevention concerns regarding the uneven relationship between class and delinquency related to schools referred to police agency services as well.

Additionally, and in a less direct response to the findings, police administrators must utilize more fully their interagency channels of communication, especially with appropriate school personnel. This is both a short-term requirement and a long-term one.

It seems police administrators should be informed of the various school special program offerings and funding opportunities and constraints for these types of special students. Knowledge of these school programs and possible school programs should increase the use of other agency resources perhaps in an arena that is more conducive to change. Knowledge of these school programs and possible school programs could permit agencies to harmonize their support for programs and services which are considered either "equitable" programs or are both "equitable and effective" programs, thereby becoming more efficient and frugal with state and community tax dollars.

Police Response: Juvenile Officers

As the direct service provider to those former detainees, juvenile officers have an excellent vantage point for further analyzing and interpreting the various logit profiles of detainee characteristics, particularly those that relate to custody and station adjustment.

A more remote implication to the findings suggests, to the extent possible, that Juvenile Officers (JO) must share with appropriate regular educators, Title I educators, special

education personnel, and related services personnel their mutual JO/school perceptions of detainee needs and their mutual JO/school perceptions of the required curriculum objectives and methodologies.

Juvenile officers must also more fully understand current and possible school programs along with the respective funding sources so as to more meaningfully relate to school personnel.

Police Response: State Law Enforcement Agency

Essentially, state law enforcement agency personnel must facilitate regulations and funding patterns which support the efforts of local administrators to meaningfully exchange data and information among the various agencies regarding handicapped and non-handicapped detainees.

Juvenile Court Response: Administrators

The chief probation officer and the juvenile court judge are considered the "legal gate keepers" for all juvenile delinquents who are referred to the juvenile court complex. Their decision determines whether or not a detainee is incarcerated. They also determine which community resources are used in the event the youth is placed on probation. The prospects for the juvenile court to provide real and long-lasting change are tremendous. A less direct implication of the findings for administrators to maximize the court's potential for helping detainees suggests that administrators must continually apprise themselves of the full range of community resources including school resources available

to them, again, perhaps, through a mechanism such as a comprehensive school-based human services plan.

One major impact of the logit profiles is that they highlight significant attributes of the detainee that must be addressed in programs and services provided by the schools, the police, and the courts.

The juvenile court also must review its internal policies and procedures as they relate to various detainee characteristics. For example, given the finding that students who have attended school prior to their first secure detention experience during the July 1, 1980 to June 30, 1982 period of this study had significantly less likelihood for both additional secure detention experience and for incarceration, the courts should encourage their respective legislators to toughen standards that pertain to school suspension and expulsion. Also, if suspension and expulsion standards tighten, schools will most likely be providing services to those students placing stress on the institution; i.e., demanding more individualized services and supervision--at a greater cost to the schools.

Again, a less direct implication, but nevertheless important one, is that administrators, in order to more meaningfully communicate to state legislators and other informed decision makers about the YAL program and school, police, or court programs, must determine a methodology for valuing these services. Cost/benefit or cost/effectiveness analyses could be utilized and supported by the juvenile court.

Juvenile Court Response: Probation Officers

Again, direct service personnel such as intake and probation officers have an excellent vantage point to observe possible underlying institutional and/or socioeconomic causes regarding the significant detainee attributes. These observations corroborated with juvenile officers could provide useful data on individual student needs for educators. Also, knowledge of current and possible school program options would provide useful information for probation officers. For better access to school personnel and policies, intake and probation officers could participate in interagency communication programs such as the comprehensive school-based human services plan. This type of communication could continue through YAL programs serving securely detained youth while more formal interagency arrangements were being formulated. More systematic and more extensive mechanism of communication ought to be considered.

Juvenile Court Response: State Law Enforcement Agency

Again, facilitating a systematic and all-inclusive way of talking about detainee needs and program options among the human services (including police and juvenile court) and school agencies is probably the most important response to the numerous logit findings.

Implications for the School-Based YAL Program

Knowing that the YAL program is effective in increasing the likelihood of attendance for some detainees permits school

personnel to plan for a continuum of services available in part at the secure detention facility and in part available in the receiving school district. Educational programming no longer must be limited to the time constraint imposed by the nature of the secure detention program. Transitioning detainees from the juvenile court to the public school is possible and probable for many. Therefore, school program planners and administrators responsible for administering the Youth Advocate Liaison Program at the juvenile court complex could continue planning special education services for that population knowing that many youths have a likelihood for continued service in the receiving school district.

Despite the numerous positive YAL and YAL interaction effects which facilitate a likelihood for desired outcomes, there remain several serious concerns regarding those effects which indicate non-desired outcomes. The YAL program must internally review and adjust its policies and practices (if warranted) toward the manner in which the program interacts with various classes, races, etc. In those instances where the YAL is successful in increasing the likelihood of desired outcome, the review could lead to a better understanding of the underlying institutional and socioeconomic causes. This knowledge, in turn, could provide a framework for reviewing those instances wherein the YAL is not successful in increasing the likelihood of desired outcomes. Most of the underlying causes are not expected to be related to the YAL. As a

result of the findings, serious thought should be given by local school districts to seek additional appropriate program authority and funding[1] to develop a YAL-type program for those detainees in detention for less than five days or for those in detention five or more days who would be better served in a regular education program.

Some specific concerns regarding the YAL program relate to several of the operational procedures discovered during the data collection process.

The estimated grade level variable, although found useful in the study, might lead to a better defined variable if the estimate of grade level could be standardized. The current practice of providing the Woodcock Reading Mastery Test and the Key Math are useful guides for developing IEP's but available only to those detainees in the secure detention facility for five days or more. Some thought might be given also to test those detainees not in secure detention for five days or more. A broader range of needs assessments for all detainees should be considered which perhaps focuses on functional skill analysis. This type of diagnostic information would better lend itself to IEP development. Also, some thought should be given to permit comparison of the

[1]As mentioned before, one such possible authority is Chapter 122, Article 18.3 of the SCHOOL CODE OF ILLINOIS.

achievement levels of detainees with the achievement levels of students in the regular education populations. It seems that regular education students are given a completely different battery of tests. Although the YAL uses existing diagnostic instruments to develop individualized instruction, some consideration might be given for also using a diagnostic test for research comparison purposes.

Since much of the literature seems to indicate that the delinquent has emotional needs, diagnostic instruments ought to be considered for measuring the affective domain.[1] The availability of affective domain data will permit a better defined model. Assessment of career/vocational education needs also might be considered for this test battery.

The referral for special education variable seems to be particularly associated with those students who seem to exhibit acting out behaviors; e.g., higher suspension rates (see Table IV). It may well be that many others require referral for special education in school offerings as well. A review of the

[1]An example of an instrument which could be used (and has been used by the Illinois Department of Corrections School District #428) is the Personality Orientation Inventory (POI) developed by Dr. Everette Shostrom. Earlier versions of this instrument were aimed at approximately a junior high level of reading. It may be necessary to adapt this instrument to the actual reading level of this population.

referral for special education policies and procedures as it relates to the home administrative district and to the others in this county is warranted.

The YAL service in conjunction with special education special school placement results in a lesser likelihood for school attendance. This is probably due again to the nature of the student being served. Consideration could be given to reviewing the placement policy and procedures for this type of student. S/he might be better served in another type of school setting and/or with a different or modified specialized instruction.

As a final note, although most programs can benefit from ongoing review and adjustment, it must be emphasized that this program works well for many, if not most, former detainees. Both the administering school district's administrators and the YAL program staff must be commended for a job well done.

Future Studies

This section relates to various implications for future research. As stated throughout, the attributes in this study do not cause the numerous outcomes investigated but rather the attributes in varying intensities indicate the likelihood of these outcomes.

1. Other similar studies should be encouraged so as to replicate these findings in other settings and under "true" experimental conditions. For example, a Youth Advocate Liaison type of transition program could be implemented for handicapped "incarcerated youth" reentering the public school or for handicapped "youth in custody" reentering the public school. In either of these situations, a random assignment of students into the control group and into the experimental group would

be desired. In the former example, perhaps two similar juvenile facilities (jails) could be selected from a state wherein handicapped incarcerated youth are provided a comprehensive special education delivery of services. Ideally, the states and facilities would be chosen at random. It would be beneficial to human service and school administrators to determine the impact of the YAL-type program for youth in this and in the various justice related settings.

2. A longitudinal study could also be utilized so as to further analyze the long-term effect of the YAL. Rather than limit the study to two years which does not seem to capture the full span of time in which a juvenile has possible contacts with law, one could study a detainee throughout a six-year period. Also, several follow-up studies every five to ten years would provide data regarding the long-term impact of the YAL program.

3. A cross-sectional study could be pursued. This type of study might include more institutional variables such as additional instructional and related services options. A comparison of a YAL-type program among various counties which have varying demographic and varying instructional delivery systems would provide a greater clue as to the nature of these institutions.

4. For reasons articulated earlier, consideration should be given to conducting cost/benefit or cost/effectiveness follow-up to this study. Such studies could be differentiated according to the perspectives of the schools, the police municipalities, the courts, and the individual.

5. A study of the curriculum issues raised by these profiles could be pursued as well. Educators might consider whether or not their planned learning experiences are meeting the needs of handicapped detainees.
6. Suspension and expulsion issues raised by the YAL also require further analyses and school policy responses. Knowledge that all detainees, especially those without YAL services have a high probability for suspension at the lower grade levels could lead to the development of additional support programs for the younger detainees.

A systematic and ongoing method for addressing the agency responses to these findings as well as to others could be through the development of a comprehensive (possibly school based) human services plan.

To accomplish such a plan, administrators from the school, police, and court agencies are urged to intensify the interagency dialogue among themselves and among appropriate direct service staff regarding:

a. Agency <u>expectations</u> toward each other and

b. Ongoing constructive <u>feedback</u> for each other's direct service and support service programs.

These implications for future research are not intended to be an exhaustive list but rather are this researcher's major recommendations for future research. Certainly many of the "newly discovered findings" can contribute to new research directions.